

CLAIMS

I claim:

1. A system for selectively controlling operation of a means for reading or marking encoded information on an article, the system comprising:

means for identifying an input provided by the means for reading or marking;

data processing means for processing the input so as to generate a desired output;

control means for controlling operation of the means for reading or marking in a manner that is responsive to at least one selected from the group consisting of: the input and the output; and

means for selectively generating and retrieving historical records related to the performance of the system.

2. The system according to claim 1 further comprising a database capable of selectively incorporating at least one subset of information selected from the group consisting of: the historical records and the output generated by the data processing means.

3. The system according to claim 1 wherein the data processing means receives a series of inputs from a plurality of sources, and further comprising a database capable of selectively providing additional inputs for the means for processing.

4. The system according to claim 3 further comprising data storage means for tracking at least one item selected from the group consisting of: the historical records and the output.

5. The system according to claim 4 wherein the data storage means comprises an external legacy system.
6. The system according to claim 1 further comprising means for selectively verifying and updating system integrity.
7. The system according to claim 1 wherein the means for reading or marking encoded information includes at least one machine selected from the group consisting of: a laser, an ink jet, a micro mill, a pin marker, an etch machine, a printer, a thermal printer, a vision board, a fixed vision camera and an image scanner.
8. The system according to claim 7 further comprising a database capable of selectively incorporating at least one subset of information selected from the group consisting of: the historical records and the output generated by the data processing means.
9. The system according to claim 7 wherein the data processing means receives a series of inputs from a plurality of sources, and further comprising a database capable of selectively providing additional inputs for the means for processing.
10. The system according to claim 9 further comprising data storage means for tracking at least one item selected from the group consisting of: the historical records and the output.

11. The system according to claim 10 further comprising means for selectively verifying and updating system integrity.

12. The system according to claim 1 wherein the encoded information includes at least one item selected from the group consisting of: alphabetic characters, numeric characters, a linear bar code, a two-dimensional bar code and a two-dimensional matrix.

13. A software system for integrating and controlling the operation of a vision/marking system, said vision or marking system having a plurality of machines for reading or marking encoded information on an article, said software system comprising:

means for selectively linking all of the machines in the vision/marking system to at least one user interface;

means for identifying an input originating from at least one source selected from the group consisting of: the user interface and at least one machine in the vision/marking system;

data processing means for processing the input so as to generate a desired output; and

control means for selectively operating at least a portion of the vision/marking system in a manner that is responsive to at least one selected from the group consisting of: the input and the output, said control means being operatively implemented by the means for selectively linking the machines.

14. The software system according to claim 13 wherein the data processing means receives a series of inputs from a plurality of sources, and the software system further comprising a database capable of selectively providing additional inputs for the means for processing.
15. The software system according to claim 13 further comprising means for selectively generating and retrieving data related to the marking system.
16. The software system according to claim 13 wherein the user interface further comprises an administrative control for governing actions taken a user of the vision/marking system.
17. The software system according to claim 16 wherein the user interface further comprises a plurality of operator control panels and wherein the plurality of operator control panels are created and modified by the administrative control means.
18. The software system according to claim 13 wherein the means for linking comprises at least one selected from the group consisting of: a local area network, a wide area network and a network implemented via internet or world-wide web access.
19. The software system according to claim 18 wherein the user interface comprises a plurality of control panels and wherein a user may selectively broadcast data to at least one of the control panels.

20. The software system according to claim 18 further comprising means for selectively verifying and updating system integrity via the means for linking.

21. The software system according to claim 13 wherein at least one vision machine and at least one marking machine are included in the vision/marking system.

22. The software system according to claim 13 wherein the vision/marking system further comprises data storage means for selectively recording and retrieving information, said information relating to at least one set of operational parameters selected from the group consisting of: the encoded information on the article, the inputs provided to the means for identifying, the outputs generated by the data processing means and actions taken by the control means.

23. The software system according to claim 13 wherein the encoded information includes at least one item selected from the group consisting of: alphabetic characters, numeric characters, a linear bar code, a two-dimensional bar code and a two-dimensional matrix.

24. The software system according to claim 13 wherein the individual machines in the vision/marking system are selected from the group consisting of: a laser, an ink jet, a Micro Mill, a Pin Marker, an Etch machine, a printer, a thermal printer, a vision board, a hand-held scanner, a fixed vision camera.

25. The software system according to claim 13 wherein the user interface includes at least one function selected from the group consisting of: universal template functions, machine interaction functions, report generation functions, data manipulation functions and network functions.